

Distribution: Caribbean slope of Isthmus of Tehuantepec area, at least in southern Veracruz.

Types: original nos. 6476 and 6477 imm. ♂(?), ad. ♀; 2 km. north of Ocotol Chico, near Cerro Santa Marta, south-eastern Veracruz, 11 Dec. 1962; taken from flock of about six by Florentino Francisco R., and prepared by him and Juan Nava S. (6477), and by Santos Farfán B. Irides yellow.

Measurements of types: im., wing 114.5, tail 127 (1 rectrix longer); ad. ♀, length 300 [+? Some *rigor mortis*?], extent 373 [+?], wing 123, tail 131.3 mm.

Material examined: also 3 from north-east of Catemaco, Veracruz.

(to be continued)

On variation in the austral populations of *Oena capensis* (Linnaeus)

by P. A. CLANCEY

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Oberholser (1905) was the first worker to believe that the Namaqua Dove *Oena capensis* (Linnaeus), 1766; Cape of Good Hope, Cape Province, populations of mainland Africa could be subdivided, when he proposed *Oena capensis anonyma* Oberholser, 1905: plains east of Mt. Kilimanjaro, northern Tanganyika, for the populations occurring to the north of the Zambesi River. Later workers, notably Sclater (1930) and Friedmann (1930), have not followed Oberholser in recognising two mainland African races, and the possibility of their being significant subspecific variation within the currently acceptable nominate race seems not to have exercised the minds of systematists for all of thirty-five years and more. Recently, I (Clancey (1964)) drew attention to the fact that there appear to be valid grounds for re-appraising Oberholser's original findings.

Critical study of a series of just under two hundred specimens of *Oena capensis* from the South African sub-continent, drawn from the collections of the South African Museum, East London Museum, Transvaal Museum, National Museum of Rhodesia, and the Durban Museum, recently carried out in the Durban Museum, shows that the division of the populations as proposed by Oberholser has no actuality. Birds occurring in East Africa do not differ as a group from all the South African populations, which latter show some quite marked variation within themselves, though its study seems to indicate the presence of more than one race of *Oe. capensis* in mainland Africa.

Examination of series *Oe. capensis* from various parts of southern Africa reveals that the birds can be arranged in two groupings on the basis of colour differences present in both sexes. In the males of one group the back and scapulars are about Drab (Ridgway [1912], pl. xlvi), into which the grey of the crown grades insensibly over the nape, whereas in the birds of the second grouping of populations the grey of the crown is sharply demarcated from the nape, mantle, scapulars, etc., which surfaces are warmer and browner (about Buffy Brown [pl. xl]), the same colour diffused over the inner greater coverts, tertials, rump and upper tail-coverts, imparting a more saturated appearance. In the case of females, there is no

clear-cut dorsal difference, though the marked trend for one group of populations to be browner and more olivaceous tinged, less grey, than the other is readily demonstrable, but when viewed ventrally the material is more readily and consistently polarised into two apparent racial groupings. The birds of one group show much clear blue-grey over the chin, fore-throat and breast, while in the second group much or all of the blue-grey colour is lacking, and the fore-throat and breast are strongly washed with buffy or rusty brown.

The differences revealed by both sexes and utilised in grouping the assembled material into two apparent races are consonant with normal trends of subspecific variation in species in southern Africa which inhabit a wide spectrum of habitats, ranging from desert edge and semidesert to markedly moister mesic biomes in the south-eastern and eastern parts of the sub-region, and show a marked increase in melanin in association with the increased precipitation in the biotope. Males with Drab as opposed to Buffy Brown upperparts and females with blue-grey throats are in the main from the dry interior and west of South Africa, characteristically from the Bechuanaland Protectorate, South-West Africa, and the Karoo regions of the Cape, while males with Buffy Brown upper parts and females with much buff or rusty overlay to the forethroat and breast seem typical of the populations breeding in the moister southern and eastern Cape, Natal, Zululand, Transvaal, northwards in the east. Many winter-taken birds tend to blur the apparent range limits of the two groups, this due largely to post-breeding dispersal and true migratory movements in some of the populations, such movements taking the desertic birds as far east in late winter as Moçambique, and the browner (mesic) birds north as far as Zambia. That *Oe. capensis* is migratory or a transient in many areas is already well documented. In coastal Natal, an area which I know well, the species does not breed, but occurs annually in small numbers in October–December, such birds presumably being transients making for breeding grounds still further south, in the Cape.

Study of the variation is still further complicated in South Africa in that not all the populations apparently breed at the same time of the year. In south-eastern Africa (eastern Cape, Natal interior and Transvaal) the species breeds mainly late October and November, whereas in South-West Africa large numbers breed in the early part of the winter (April, May). Smithers *et al.* (1957) show that in Rhodesia the species has been recorded breeding virtually throughout the year, with a peak in September and October. Benson and White, writing on Zambian birds (1957), give the breeding season for that territory as mainly August–October, while Malawi breeding records are mainly April–July. McLachlan and Liversidge (1957) list the species as breeding in South Africa throughout the year, with peaks in May and September–November, without indicating the sources of their data, which are of composite origin, but it seems that the populations of the desertic interior and west of southern Africa are in the main winter breeders, those of the moist east and south-east nesting later in the year, during the spring rains (September–November).

Allowing for anomalies in locality data deriving from local post-breeding movements and true migration on the part of some populations, it is desirable to admit two racial groupings of the populations of the Namaqua

Dove in zoogeographical South Africa, very much along the lines adumbrated in Oberholser's pioneer study of sixty years ago.

In arranging the populations of the Namaqua Dove indigenous to zoogeographical South Africa into races, the question of nomenclature naturally arises. *Columba capensis* Linnaeus has its type-locality as the Cape of Good Hope, Cape Province. Most recent material from near Cape Town is typical of the buffy brown mesic populations, though in this region the lighter and greyer backed desertic birds impinge closely on the toptotypical populations of *Oe. c. capensis*, ranging south along the arid west coast of the Cape to about the lower Berg River. For the greyer and lighter desertic birds I tentatively employ the name *Oe. c. anonyma*, as they appear inseparable on any valid population characters from the East African material currently available, though ranging a little larger in size. *Oe. c. anonyma* may be a polytopic form associated with desertic or semi-desertic (xeric) conditions, and the southern and northern populations may not be in contact, but study of a more comprehensive breeding material from north of about 8° S. lat. in Africa will be necessary to resolve this question.

The nomenclature, characters and ranges of the two races of *Oe. capensis* occurring in Africa are as follows:

(a) *Oena capensis capensis* (Linnaeus).

Columba capensis Linnaeus, *Syst. Nat.*, 12th edition, i, 1766, p. 286:
Cape of Good Hope, Cape Province.

Male with forehead, distal surfaces of face, chin and fore-throat black; top of head Gull Gray (pl. liii) with variable hinder brown overlay; back and scapulars Buffy Brown (pl. xl), this colour diffused over the tertials, rump and upper tail-coverts. Female greyish Buffy Brown on upper parts, and chin, fore-throat and breast light grey, the fore-throat and breast feathers broadly apically fringed buff or light rusty brown. Wings of 10 ♂♂ 106-115 (112.0), tails 132-152 (144.0), wings of 10 ♀♀ 103-110 (106.8) tails 121-145 (133.3) mm.

Material examined: 68.

Range: South-western and southern Cape, Orange Free State, (except west), Natal interior, Zululand, Transvaal, ? Swaziland, Moçambique, and eastern Rhodesia (? breeding). Taken north as far as central and northern Zambia as non-breeder in May and November.

(b) *Oena capensis anonyma* Oberholser.

Oena capensis anonyma Oberholser, *Proc. U.S. Nat. Mus.*, vol. xxviii, 1905, p. 843: plains east of Mt. Kilimanjaro, northern Tanganyika. As last, but males with back and scapulars about Drab, appearing distinctly lighter, greyer, and less saturated, which surfaces are not so sharply demarcated from the grey of the head-top. Female inclined to be greyer, less olivaceous over the upper parts, and with the chin, fore-throat and breast lighter and more bluish-grey, the feathers narrowly fringed greyish or vinaceous brown. Wings of 10 ♂♂ 106-117.5 (110.3), tails 128.5-158.5 (141.1): wings of 10 ♀♀ 101.5-111.5 (105.3), tails 127-140 (135.4) mm.

Material examined: 124.

Range in South Africa: Little Namaqualand and the arid western Cape coast, eastwards through the Karoo regions to western Orange Free State, and in South-West Africa, Bechuanaland Protectorate, northern Cape,

western Transvaal, western Rhodesia, western and southern Zambia, and Angola. Extralimitally over rest of species' mainland range, and to Arabia and Socotra.

References:

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Notes on African warblers of the genus *Chloropeta* Smith

by STUART KEITH and CARL VERNON

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Scattered notes on members of the genus *Chloropeta* Smith, made by the authors in various parts of Africa, are here brought together in one article for convenience. The notes from Zambia were made on trips made possible through the kindness of Mr. C. W. Benson, recently of the Livingstone Museum, Livingstone, Zambia. To him we here record our thanks.

Chloropeta gracilirostris bensoni Amadon

Although this species has been known from Lake Mweru since 1938, this population was not described as a separate race until 16 years later when Amadon (1954) named it on the basis of a series taken by Benson in September 1953 at the mouth of the Luapula River at the southern end of Lake Mweru.

We have referred briefly elsewhere (Keith and Vernon) to our experiences with this bird by the Luapula River on 8th December, 1964. We were unable to collect any birds due to the depth of the water and the dense nature of their papyrus habitat, but numerous tape recordings were made of the song, of which the four most representative are reproduced here. (See illustration on p.119)

The song consists of a series of short phrases (maximum duration of any one phrase, 0.7-0.8 seconds), uttered at irregular intervals, in a manner somewhat reminiscent of the New World vireos (Vireonidae). The birds had a tendency to take one phrase and repeat it a number of times before going on to the next phrase, which they would likewise repeat. The song has a plaintive quality, and is rather weak compared to the boisterous outbursts of *Calamocichla rufescens nilotica* Neumann, which was singing in the same papyrus beds. For comparison, a single phrase of the latter's song is reproduced here (example E); the song is loud and guttural, and phrases lasting several seconds are common.

It may be of interest to record here that Keith also recorded *Calamocichla rufescens foxi* (Sclater) at Lake Bunyoni in Uganda in 1962, and he can find no difference at all in the songs of the two races. This would seem to support the conclusions of Chapin (1953) and Pitman (1956) that